

Patent Claims:

1. Apparatus for the laboratory testing of enclosed partial cabins as resting room or space for the installation in commercial aircraft for an acoustic design and testing, characterized in that the partial cabin (1) is arranged via at least one vibration generator (4) for the simulation of an excitation structure-borne noise in the area of connection elements (2) to the fuselage structure, and elements (5) for the airborne noise excitation are allocated to the partial cabin (1), whereby the vibration generators (4) for the structure-borne noise and the elements (5) for the airborne noise excitation are adjustable via control and regulating devices (6), and the signals are generatable via a computer unit (7) with an input data file (8) of knowledge-based data, as well as, if applicable, by extrapolation of the acoustic values at the installation location and of the design of the partial cabin (1).

2. Apparatus according to claim 1, characterized in that the input data file (8) of knowledge-based data contains at least the proportions of the various different noise transmissions from analyses of existing installed acoustically-designed partial cabins (1) as well as of the measured values of the present subject relationships in the aircraft with respect to installation locations.

1 3. Apparatus according to claim 1 or 2, characterized in that
2 the vibration generator (4) of the partial cabin (1) are
3 embodied as piezo vibration generator.

1 4. Apparatus according to one of the claims 1 to 3,
2 characterized in that an allocated loudspeaker arrangement
3 (5) is controlledly driveable or actuatable for the
4 airborne noise excitation.

1 5. Apparatus according to one of the claims 1 to 3,
2 characterized in that reverberation chambers are arranged
3 directly on the sidewalls of the partial cabin (1) for the
4 airborne noise excitation.